APRIL 2020

BRAKES ON.....
THROTTLE SET.....

CONTACT!

THIS MONTH

Let's go flying: Jorge da Naia

CHAPTER CHATTER

FAREWELL GERALD MADDAMS EAA CHAPTER 1502

BY MARIE REDDY

1502 Monthly Breakfast Fly In and Farewell to Gerald Maddams

On 1 March, 1502 hosted a fly In breakfast at Baynesfield. This was also Gerald's last event at the airfield before his planned departure to the UK.

Those that know Gerald, will be aware of the huge contribution he has made to the EAA in this part of the world. His enthusiasm and continued commitment to the EAA is commendable.

Breakfast was great and the friendly banter was an indication of the community spirit enjoyed at Baynesfield. I'm looking forward to being able to visit this beautiful airfield and the good folk of Chapter 1502 again in the near future.

Due to other commitments which restricted my time, I took advantage of an evening drive to Baynesfield.

My over night accommodation on 29 Feb was at Sacred Farm, a mere 6km from the airfield, which gave me the opportunity to relax and drive through to the airfield early and enjoy the company of the 1502 gang.

PS : Sacred Farm was a surprising find and a lovely accommodation establishment. Not just a gem of a find but also really well priced. The owner, Naomi was a pleasure to deal with and although I insisted she leave a key for me, she waited up for my arrival late on Saturday evening. If you thinking of visiting Baynesfield and want to stay in the area, Naomi@ Sacred Farm can be reached on 0827824181.

Thanks for the awesome hospitality 1502!

Keep it safe through the lockdown.

Marie Reddy

CHAPTER CHATTER

CHAPTER 1502 EAST COAST

By ALAN LORIMER: CHAIRMAN

I am honoured that I received the support of the committee and chapter to be nominated as the new chapter president. I hope I can emulate the performances of previous presidents.
In Gerald Maddams we have lost an amazing aviation boffin and historian with so much knowledge. It will not be easy filling this gap, but we have a dedicated bunch of committee members who have always produced the goods and no doubt will continue to do so.

Baynesfield airfield is an agricultural strip 800m x 36m and has been around for many years. There was a suggestion many years ago about moving there, but nothing happened.
With the current airfields situation being rather precarious in KZN , with current owner's selling off, we were always looking for an alternative strip. Mike Kork was the initial motivator to investigate further and along with Gerald Madams and Russel Smith set off for the initial meetings with the Baynesfield Trust.

Gerald, being the only retired person on the committee, then took up the reins and with the committee held a special general meeting of 1502 to see if we would get the support of the chapter to move forward and commit money and signatures to moving 1502 from its original home, Grass Roots Farm , to Baynesfield. There was unanimous approval from all present to go ahead.
At the meeting, Neil Upfold offered to build the hangar, Jan Jefferis offered to draw up the plans and there were several other offers of assistance form the members.
Gerald then proceeded to put everything in place and motivated the committee to proceed with operation Baynesfield.

To cut a long story short the build started with several members assisting on an ad-hoc basis. Neil brought his team of guys and they got stuck in. The chapter is grateful to Neil and his team for their efforts and this culminated in Neil receiving the Harry Antel trophy for ultruism at the Baynesfield open Day on 16th December.

CHAPTER CHATTER

CHAPTER 1502 EAST COAST CTD.....

At the same time as the hangar was erected 1502 was donated a 40ft container to store all our work goods and materials by Steve Ohara, and Andre Smit organized a 2 piece pre-fabricated Room, for a club house, from a company called M Projects. Alan Lorimer organized a fitted Kitchen in a knock down kit which was installed by Robbie Els and Russel Smith. A toilet and hand basin was donated by Rob Beech, which will be installed in due course into the WC which was donated and installed by Ivor Smith, a new member of 1502. A field radio was donated by Jas van Wyk.

After the hangar was completed, Grass Roots was vacated and everyone moved to Baynesfield, lock stock and barrel.

This is when the real work on the field started. 2 people, namely, Robbie Els and Russel Smith have dedicated **every weekend** since October to establishing what is currently at Baynesfield. The list of achievements reads as follows:-

Both on tractors for 5 hrs every weekend to re-establish and cut the runway grass.

Install the security fence and gates for the field.

Connect the clubhouse and hangar electricity.

Connect the clubhouse and hangar water.

Install the kitchen with sink/water and a gas geyser.

Install the field Radio and aerial.

If I have left anything out I apologise. These 2 guys have been amazing.

OK so we are now at the new field. We have 4 aircraft in the hangar, namely, a Savannah, a Challenger, a 1948 Piper Vagabond PA 17 and a Sling. It's a tight squeeze but we are all in. Our intentions are to attract other 1502 members to build hangars and establish themselves here. 3 of the 4 aeries are flying and the Vagabond will fly this year.

CHAPTER CHATTER

CHAPTER 1502 EAST COAST CTD.....

CHAPTER CHATTER

CHAPTER 1502 EAST COAST CTD.....

CHAPTER CHATTER

From: gerald maddams [mailto:gmaddams@yahoo.co.uk]
Sent: 02 March 2020 21:20
To: marie reddy (new)
Subject: ***Perhaps my final email to 1502 Members***.

Hi Everyone.

I need to thank so many people, and I thought that an e-mail might be the best way in which to accomplish this.

As many of you are aware, I am leaving for the UK in a couple of weeks in order to take up employment restoring aircraft (mainly Boeing Stearmans).

Firstly, I must thank the chaps in Chapter 1502 who put together a wonderful 'Going Away' breakfast at Baynesfield yesterday. **Alan Lorimer**, **Russell Smith** and **Robbie Els**, aided and abetted by others I am sure, coordinated the cooking and fed the troops.

The day also contained a number of surprises.

Marie Reddy drove down from Johannesburg specially to attend, and the 1502 team knew all about her visit but never breathed a word of it to me. I am very conscious of the effort Marie made, and I thank her for her support and dedication to the EAA, and to me.

The committee had surreptitiously done some scrounging and they gathered member's contributions in order to purchase a couple of seriously lovely gifts. The first I opened was a box containing 4 beautifully sandblasted wine glasses carrying the 'EAA South Africa' logo, plus the words "Ch1502 Baynesfield". The second was a massive ice bucket with an engraved plaque that carries a lovely farewell message on it. I am thrilled with these gifts which will be a continual reminder of the wonderful time that I have spent in your company. Therefore, **I thank all who contributed** in whatever way to those memorable gifts.

There must have been 40 plus people who came to bid me farewell, and they arrived in 12 aeroplanes and lots of cars. **Thank you all, for meeting and mixing**, and long may those activities continue. You don't need me there to enjoy the facilities that the EAA Home Field now offers. Build a hangar at Baynesfield and be part of the vibrant future that I am sure will prevail there.

Then some long overdue and vitally important THANKS:-

Andre Smit, who allowed me to gain my pilots licence (indeed -'insisted') by flying his aeroplane. **Robbie Els** also allowed me some hours in his plane. A lifelong dream was made possible and real by these guys, and I am so very grateful to them.

The aeroplane needed an instructor, and **Rolly Stedman** stepped forward and offered his time – and somehow never seemed to pick up the payment !!?? for his brilliant tuition. I wish Rolly 'God Speed' to his new home in Canada. We will lose somebody very special as he leaves SA later this month.

CHAPTER CHATTER

GERALD MADDAMS FAREWELL LETTER CTD.....

Noel McDonno did my final flight test, and **Geoff Dyer** waived the fee due to him. What a wonderful gesture. Thanks Guys.

And then the Bantam, ZU-DIG. **Mike Korck** will always have a special place in my heart, as he made it possible for me to own and fly this truly delightful little aeroplane for the last few years. It is impossible for me to adequately express my sincere and heartfelt thanks to him and his lovely wife **Jean**, for the generosity that they exhibited in allowing me to achieve aircraft ownership.

Len Cormac, for his hours of labour making parts for my Auster, and doing ATF's on the Bantam, and charging way below the correct charges. Thanks Len. Get better soon, my Friend.

Then there are the guys and girls who entrusted me with work on their aeroplanes**. Dr Gordon Pickles, George Harrowbeer, Jonno Low, Linda Williams, Dean Hunter, Trevor Arnold, Bill Yeo, John Haigh.** You kept me from starving, and provided me with an occupation that has led me to the next chapter in my full and exciting life. Thank you all, and may your aeroplanes fly well, long into the future.

Lastly I thank Bantam B22J ZU-DIG for 150 hours of pure joy whilst sat in her cockpit. If anyone should know of someone wishing to purchase this brilliant little aeroplane, please ask them to contact me. ZU-DIG is for sale at an extremely reasonable price, as I can't take her to England with me.

So it is, good folk, that I bid you adieu.
God willing, I will return from time to time and I hope to find you all well and enjoying the EAA Home Base at Baynesfield.
Fond Regards.

Gerald Maddams. 0725615469

SPECIAL FEATURES

NASA U—2 RESEARCH PLANE

By Bill "Lefty" Leftwich

Yesterday, Sunday, I was at Hunter Army airfield in Savannah to get a close up look at the NASA U-2 research plane that's been here for a few weeks of flying around and investigating stormy weather. When I got there, the pilot already had on his pressurized suit and was getting ready to climb into the cockpit. After cranking the engine, he taxied the aircraft over to the west end of the 10,000 foot runway and took off in less than 1,000 feet.

On the ramp at Hunter Army Airfield. The pods on the wings contain scientific measuring instruments.

The yellow container has liquid oxygen in it.

SPECIAL FEATURES

NASA U—2 Research plane ctd.....

Taxiing for take off. The temporary landing gear on the wing drops off once airborne.

The tail wheel is the only steering device.

Take off and climb out is quick.

SPECIAL FEATURES

NASA U—2 Research plane ctd.....

The aircraft and crew are based at Edwards AFB in California. All the U-2's were built by Lockheed

An "empty" pressurized flight suit with 1.5 PSI in it. He's able to take a piss, but that's all.....

Since the flights can last as long as eight hours, different types of food and beer can be consumed thru a tube inserted into the helmet. This was beef stew made by the same folks that make those delicious MRE's.

Cruising speed is 400 mph + at altitudes above 60,000'.

It was a very interesting day!.....

Cheers,

Bill

SPECIAL FEATURES

DEMYSTIFYING DENSITY ALTITUDE

By Dr Robert Clark

……it happened a few years ago when I was taking some friends for a flight in our trusted Jabiru 430. With myself as Pilot in Command and two friends, half tanks of fuel and a lovely hot summer's afternoon on the Highveld; what could possibly go wrong?

There is a common mistake made by pilots that the altitude of the airfield above sea level is the altitude that the plane is trying to get airborne in. Witbank Airfield has an altitude of 5 078 ft above mean sea level (AMSL) so all take-off's at Witbank will be done at 5 078 ft AMSL.

Whilst that is self-explanatory, the aircraft does not know that it is at 5 078 ft ASL. It's only reference in terms of performance, is the surrounding air around the aircraft. If it is a hot day, with an outside air temperature 35°C and a low pressure over the airfield, can we still assume the plane will perform as if it was at the field elevation for Witbank?

Many pilots throughout the years of aviation have made this wrong assumption, with dire consequences.

There are essentially three factors affecting density altitude. They are temperature, pressure and humidity. For simplicity sake, let's just focus on the information we have readily available as pilots, being pressure and temperature.
We need a simplistic formula to do the calculation before take-off.
As humidity plays a lesser role in the calculation, let's remove this factor but be aware that your answer will be an approximation, and will have a marginal degree of error. The two factors are:

Pressure:

When the air pressure on a given day is higher than standard 1013.25 millibars (mb), you have more molecules for a given volumetric area and similarly, when you have a lower pressure than standard, you would have less molecules for a given volumetric area. Where do you get atmospheric pressure in the cockpit?

Look at the Kollsman window or barometric scale in the altimeter.

Temperature:

The standard temperature at sea level is 15°C. For every 1000 ft we move away from sea level, the temperature drops 2°C (actually 1.98°C/1000 ft from sea level to 36 090ft). Where do you get temperature in the cockpit? Most aircraft are fitted with an OAT, or outside air temperature.

SPECIAL FEATURES

DEMYSTIFYING DENSITY ALTITUDE…….CTD

Before we get into the calculation, why is it important that we do the density altitude calculation before take-off. The aircraft's performance is directly proportional to the air within which it flies.

If we are at Witbank with a field elevation of 5 078 ft AMSL and we have a high temperature of 35°C and pressure of 1015 mb, the aircraft would behave as if it was at approximately 8 618 ft AMSL. This would imply that:

The engine performance would be diminished due to the reduction of oxygen going into the cylinders, unless your aircraft is turbo charged. Think about this: for every 1000ft above sea level, you can add ±25% to your take off run.

The aircraft needs air over the wings to fly. This will imply a higher ground speed before you get airborne
as a high density altitude impairs lift.

The propeller is an airfoil and it needs dense air for optimal performance. If it operates in a less dense environment, it cannot operate effectively with a resultant reduction in thrust.

Let's add all this together. If you are lined up on the runway on a "hot and high" day at maximum take-off weight, you will find the engine performance rather sluggish, the ground run will be considerably longer and you may be reading the numbers at the end of the runway before you rotate.

Once airborne, you will find your climb rate to be diminished to the point that you may break out into a sweat as you see the town's church steeple starting to approach, with little hope of climbing.

To avoid this precarious situation, do the density altitude calculation before take-off and if necessary, defer the take-off until the late afternoon, when things have cooled down. Let's do the simplified calculation, knowing that it is not an exact science as the humidity factor is ignored.

Firstly, look at the Kollsman window and reset the sub-scale so that the altimeter reads the altitude of the airfield. In this example, Witbank is 5 078 ft AMSL and let's assume the sub-scale reading is 1 018 mb (QNH). We also know that QNE is 1 013.25.

Secondly, look at the outside air temperature on your instrumentation. For this example, let's assume a typical summer day on the Highveld at 35°C. We also know that the standard temperature at sea level is 15°C. International Standard Atmosphere (ISA) conditions at sea level are 1 013.25 mbar and 15°C, and temperature will decrease at a standard lapse rate.

SPECIAL FEATURES

DEMYSTIFYING DENSITY ALTITUDE…….CTD

Let's try and piece this puzzle together in a simplistic manner.

Step. 1 Find the Pressure altitude (PA):

PA = (standard pressure – current pressure setting) x 30 + altitude of airfield

PA = (1 013 – 1 018) x 30 + 5 078

PA = 4 928

Step. 2 Find the Density altitude (DA):

We know that density altitude is pressure altitude corrected for non-standard temperature. What that definition is saying is, density altitude is the altitude where the plane feels like it is above sea level.

Density altitude (DA) = PA + (120 x (OAT – ISA temp))

To determine ISA, try this trick. Take the airfield altitude (only the first digit) and multiply by 2. In our example, we get 5 x 2 = 10. We then say 15 (ISA) – 10 = 5°C

The DA would approximately be 4 928 + 120 (35 – 5)

The density altitude would approximately be 8 528 ft. Even though you are at an airfield elevation of 5 078 ft, the aircraft would perform as if it was at 8 528 ft.

Let's look at another example:

Witbank airfield 5 078 ft AMSL
It is a chilly winters morning at 6°C
Kollsman reading 1 020 mb

Step 1: PA = (standard pressure – current pressure setting) x 30 + altitude of airfield

PA = (1 013 – 1 020) x 30 + 5 078

= 4 868 ft

Step 2: Density altitude (DA) = PA + (120 x (OAT – ISA temp))

ISA = 15 - 5 x 2

= 5°C

DA = 4 868 + 120 (6 – 5)

= 4 988 ft.

SPECIAL FEATURES

DEMYSTIFYING DENSITY ALTITUDE…….CTD

Let's look at the information in a tabulated form

Information for Witbank 5 078 ft	**Pressure Altitude**	**Density Altitude**
Current pressure 1 018 mb	4 928 ft	
Current pressure 1 020 mb	4 868 ft	
OAT 35°C at 1 018 mb		8 528 ft
OAT 6°C at 1 020 mb		4 988 ft

……and this is the problem with density altitude as it can turn a routine take-off, into an accident if the conditions are hot and high. Witbank with a field elevation of 5 078 ft AMSL could vary in density altitude between 4 988 and 8 528 ft (for the given pressures and temperatures in these examples). The performance penalty you will experience at a density altitude of 8 528 ft is significant, especially when you are trying to climb after take-off.

As a precautionary practice, never take off in high density altitude conditions if you are at maximum take-off weight (MTOW). Literature research suggests no more than 90% of MTOW in hot and high conditions, but this should always be checked against the Pilot Operating Handbook for your aircraft.

There are multiple App's you can download onto your cellphone that will calculate density altitude, should you not want to do the manual calculation before hopping into the aircraft.

Before your next flight, please ensure that you consider density altitude before you put yourself, and your passengers at risk.

SPECIAL FEATURES

EAA of SA Auditorium Update

By Marie Reddy

As many of you will have seen at the Talk Shows we have been able to host this year – the Auditorium is looking much better than it has for some time, after an upgrade last year.

There were no structural changes as this renovation included fixing and repainting the roof, ceiling, exterior walls and interior walls only.

A clean up of the Container has taken place and all goods have been sorted out and repacked.

We have a fairly substantial collection of old aviation magazines and aircraft manuals (mostly donated by Archie Kemp way back

when…).

Marie has also purchased a collection of aviation books which will be donated to an EAA library, and together with the magazines, the plan is to place these in the new work space that has been created.

I would like to extend a HUGE thanks to Nicky Fouche of www.revamprand.co.za for undertaking the project of transforming the old change room – kitchen – bar, into a usable working space at no cost to the EAA at all.

Your sponsorship of this task is sincerely appreciated .

SPECIAL FEATURES

AUDITORIUM UPDATE ctd.....

A WOMAN AND A SLEDGE HAMMER IS CLEARLY.....

.....A DANGEROUS COMBINATION!

SPECIAL FEATURES

AUDITORIUM UPDATE ctd.....

Transformation

WELL DONE ON A FANTASTIC JOB WITH THE AUDITORIUM, MARIE AND THANKS FOR THE BOOKS FOR THE LIBRARY.

EAA AUDITORIUM

FEATURING

THE FLYING LEGENDS TALK SHOW

STARRING: BRIAN STABLEFORD

AKA "THE GENERAL"

SUPPORTING CAST: KARL JENSEN

SET:	MARIE REDDY
VIDEO:	ATHOL FRANS
SOUND:	MIKE HAUPT
PHOTOGRAPHY:	STEVE THERON

A VIDEO RECORDING OF THE PRODUCTION IS NOW AVAILABLE HERE

https://www.youtube.com/watch?v=dARtzrHzLGw

SPECIAL FEATURES

THE ARTICLE WHICH FOLLOWS IS A REPRODUCTION OF AN OLD ARTICLE FROM "HOMEBUILDER" DEC 1973 - JOURNAL OF THE EAA OF SA WHICH WAS UNEARTHED DURING THE RECENT AUDITORIUM CLEAN-UP BY MARIE REDDY. .

Copies supplied by Gerald Maddams and permission granted by Steve Crutchley, the editor of the issue.

A HAIRY EGSPEERIENCE

By Pookie

Like my maatie says "A bird in the hand is worth two in the back seat"

If you are taking your favourite bird for a ride in a vliegie this weekend, just take a few tips from a ou who is vastly egspeerienced in this field. As one can imagine, this can be a lekker pass time, so long as you don't get no 'komplikashuns'.

Now when it comes to 'komplikashuns' I am more egspeerienced than the telephone department.

So I met this mooi chick at a party that me and my maat has gate-crashed and some ou is telling her how he can do a ton on his 'iron', so I ups and sez I can do more than a ton in a vliegie and she lights up, so we make a date.

Now I can tell a babe whats got class quicker than most, and when I sees she even wipes the top of the dop bottle before she takes a swig, then I'm sure she's got the sort of charm my old ma talked about . And she ought to know cos she's got a black belt and a couple of Dans from the charm school in Blikkiesdorp.

By the time this little cherrie has hitched to the airport, I am already there and making like I'm taking the greatest care to ensure that the vliegie I borrowed is in the best of condition.

SPECIAL FEATURES

A HAIRY EGSPEERIENCE CTD.....

It so happens that |I have been lucky enough to get a china of mine to borrow me his plane on account that it's been standing for a long time and is all to do with some ou what's called a messenger of the court, all of which hasn't got nothing to do with me.

Well after I has stamped down the khaki-bos and cactus that's grown up around the vliegie, I commences to do a pre-flight check. A careful walk around satisfied me that the engine, propellor, wings and tail are all there, and a closer inspection shows that even small details like the wheels and spars are all where they should be, although the former is a beitjie flat and the latter is a beitjie bent.

After we clears the cobwebs from all the clocks and dials and dusts down the inside a bit, I get this nice little cherrie of mine to get in while I sommer makes an arrangement with a local to give the prop a swing.

About this time she says she's not so keen on aviation after all and maybe we can go to the Bio instead, and it takes me a little time to calm her down and assure her that she is about to have the egspeerience of a lifetime. Also, that the carpet is not moving and its her imagination and excitement.

So after some negotiation with the ignition and the fuel system, the whole box of tricks comes to life and it is not long before we are romantically climbing into the 'wide blue yonder'. Such lekker weather and good visibility makes the whole scene seem like it's my special day.

It's about now that the komplikashuns set in.

Suddenly this popsie makes a grab for me that makes me think that I am about to become president of the 'Mile-high club'. So I shouts to her where's her manners? We are not even outside the circuit yet and to wait till we are at cruising altitude, - like 500 ft!

Then I notice that she is crouching on the seat and there on the floor plank is the biggest spider you ous ever saw. Man, this thing is like a soup plate and he's got hair like a pop singer. And a pair of eyes like a DCA inspector.

So suddenly the rubber pedals become surplus to my flying requirements and I am also crouching on the seat. In the next few minutes you ous must understand that there was a certain amount of confusion aboard. Like this dollie is all for leaving for home right now-now. Also that my hairy friend disappears back under the seat and comes up at the back of the seat like he wants a better view. Then he's gone again and the next time we sees him he's halfway up the stick. Strange how a ou can fly on the trim only when the need arises.

He soon gets tired of this perch and makes off under the panel. Now all eyes are on the clocks and sure enough, I can see a long hairy leg appear under the glass on the D.I.

Then the fuel gauge, - then here, then there….

SPECIAL FEATURES

A HAIRY EGSPEERIENCE CTD.....

Man, I can tell you, it takes courage to put your hand on the throttle when you got a ou like this maybe watching from just behind the friction nut!

Now fortunately our airstrip is sommer long and smooth.

The landing was a sort of makeshift arrangement with Isac Newton, with whom I have seldom had such a brief transaction. All this fancy talk you ous hear about “Kindly remain seated until the aircraft is stationary” is strictly for those big fumigated primus stoves.

Long before the third bounce the doors is open and this little dollie is off like it’s half price day at the O.K. When she catches up with me she says some words that I haven’t heard since my maat caught his braces in the emergency-chain down at the shunting yards. So maybe she doesn’t got culture like I was telling you ous about.

So like I sez to my maat over the second bottle of dop that evening,

YOU GOTTA LOOK UNDER THE CARPET WHEN DOING A PRE-FLIGHT CHECK

If you have space to fill, you may as well fill it with something pretty.

SPECIAL FEATURES

IS THERE A HIGHER POWER?

BY BRIAN APPLETON

Just before the Corona virus really took hold of us, a colleague and myself were in the UK for business.

Having had our professional fair cancelled we decided to go anyway, with one day to be spent in London and the remaining 4 days driving around the UK, visiting our suppliers.

The day we arrived was the day we were going to spend in London. Within two hours of arriving at Heathrow, we were in meetings right through to the early evening.

Now to the beginning of the story.

A few months ago, our good friend Peter Lastrucci acquired a Tiger moth. Having, as one of my treasured books, is the bible of Tigers called TIGER, by Stuart McKay.

Stuart is the world's foremost authority on matters de Havilland. He is also not surprisingly the chairman of the de Havilland society in the UK. He is world renowned, having written several books and is a truly modest and good natured gentleman.

Having got through a few pages of the book, Peter called me up and asked, well pleaded, if I could not get him his own copy of the book on my trip to the UK.

So back to the day we arrived in London, meetings back to back, I had planned a little gap of an hour to grab a taxi, head to Foyles bookstore, grab the book for Peter and then onto our next meeting.

Disaster, Foyles are out of the book.

The next day up early and off to Heathrow, pick up a hire car and travel an hour to a little town north of London for our first meeting of the day.

Driving down the main street, sorry, to be correct, the High street of the town at 9.20 am in the morning, there is Stuart McKay himself, walking down the main street.

Stuart, living in the same village (I had no idea), was walking back to his house after an appointment further up the main road.

Of course a South African taxi U-turn was executed as we sped after Stuart.

Stuart, always the consummate gentleman, was delighted to see us and we had a most wonderful chat for a few minutes. We told him the story of trying to obtain a copy of his book just the previous day. What are the chances of this meeting?

Is this fate, coincidence or the intervention of a higher power?

Unfortunately we are still bookless, ok we got hold of Amazon in the end, as Stuart does not keep copies at home.

SPECIAL FEATURES

Who is Right ?

By FRANS GROTEPASS

In the art of instrument flying the skills of visual cognition of the picture presented on the instrument panel is transferred via the muscle memory of the pilot controlling the aircraft with the result of a safe flight “albeit sometimes.”

I have been fortunate to have been flying for 55 years. In these years I progressed from PPL to ATP with an instrument rating for 42 years. The aircraft I have flown have ranged from weight shift to jet aircraft with a lot of turbo-prop time as well.

During this time I have witnessed the tremendous advancement from basic gyro instruments scattered all over the panel to the more organized “six Pack”.The pointer lay out is still used today by all the big boys.

Above, an early AH

SPECIAL FEATURES

Who is Right ? ctd.....

The “six Pack” was then partially replaced with electronic HSI and DI instruments replacing the vacuum/pressure driven gyro instruments.

These instruments soon proved to be more reliable then the gyro instruments and the dreaded loss of a vacuum pump was disappearing .

GPS and Glonass arrived and the engineers gave the aircraft flight management systems with glass cockpits incorporating massive databases of maps, approach plates, airport diagrams and everything to compliment the function of the aircraft.

Pilots became FMS managers. Airbus had their philosophy and Boeing had their own view.

Pilatus came with the PC12 NG glass cockpit. Honeywell was the company responsible for the fully integrated FMS Cockpit.

Grumman and other aircraft producers also used Honeywell.

In the early days there were teething problems with plenty updates and upgrades, but The PC 12 was playing and thinking like the Airbus and Boeing.

EFIS Panel from the PC12

In the smaller market Garmin Dynon Aspen and others were looking after the smaller aircraft especially the unrestricted home builder market and their design initially was not restricted by certification limitations.

SPECIAL FEATURES

Who is Right ? Ctd.....

I bought a Dynon D2 standby rechargeable battery driven standby HSI . Excited by this magnificent new technology it was test flown at night in the PC12.

To my amazement I became aware of the big difference in design layout, initially very subtle , but then I realized the big difference in design philosophy and that very subtle on first appearance, the difference could be a killer especially on departing aircraft entering IMC just after take-off. The difference lies in the what we call the “Sky Pointer” and what I would call the “Roll Pointer”.

The Dynon: we are doing a left turn indicated by the “Roll Pointer” 18 degrees as well as the magenta indication showing a left turm. The “Sky Pointer” points down perpendicular to the Horizon. The “Roll Pointer” reads like the minute hand of a clock. To roll the wings level just bring the Roll Pointer to the Sky Pointer.

The slip indicator is self explanatory. On the Garmin presentation the slip indicator is part of the base of the Roll Pointer. So the aircraft is presented by 1. The Roll Pointer, the base is the same as the slip indicator. 2. The wing indicators L and R and 3. The Dot which indicates the angle of attack.

SPECIAL FEATURES

Who is Right ? Ctd.....

In the Garmin display we immediately identify the “Sky Pointer” as well as all the components of the aircraft and on the base of the “Roll Pointer”, we see the slip indicator. In this case, we step on the slip bar as we would have stepped on the ball and then trim. Both the Dynon and the Garmin read the same and are very intuitive.

The PC12 follows the same outlay as Airbus Boeing Grumman.

On this Grumman display below, the “Sky Pointer” and the “Roll Pointer” are reversed and point in the opposite direction.

This time, the “Sky Pointer “ points to the sky. It also has the slip brick or bar in its base. This is an anomaly because the slip bar should be part of the aircraft indicators. The pointers, however, still follow the same format as can be seen on the old AH in the beginning of the article.

SPECIAL FEATURES

Who is Right ? Ctd.....

The fact is that in EFIS equipped aircraft there are two systems on first glance they appear the same, in deeper analysis the recognition and the following muscle action are reversed.

For pilots flying the same equipment all the time it is no problem like in the airline industry.

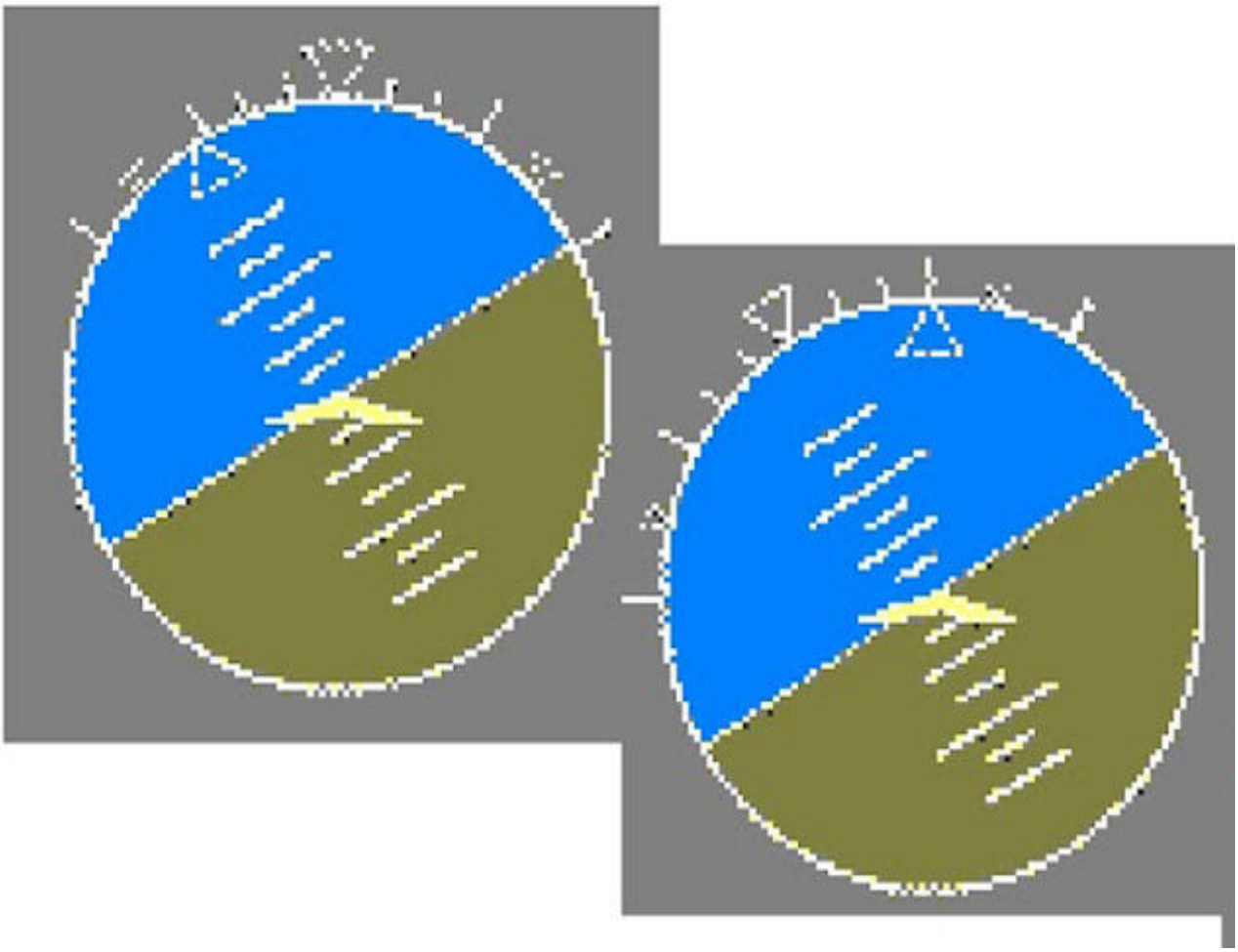
For pilots flying different aircraft the only advice is recognize which pointer format your EFIS has and adjust your perception and muscle memory accordingly.

If your perception is wrong decreasing your roll will actually increase the roll and entering a low overcast is where this can become dangerous.

We cannot change the instrument protocol; that would end up in chaos, because “Who is Right”

However the responsible serious instrument rated pilot can adapt because the EFIS panels have come to stay.

The basic rule is move the “Roll Pointer” towards the “Sky Pointer”



In 2002 Singer & Dekker* did a study on the performance of pilots using the different pointer systems and found in their study that the pilots made 5X more bank mistakes (the upper left picture) Having flown both systems the general aviation indication is more intuitive it follows the same intuitive interpretation as reading an analogue gauge. (The lower right picture)

SPECIAL FEATURES

Who is Right ? Ctd.....

Above a display from a Grumman Gulfstream showing the Big iron display.

*Singer,G. & Dekker,S.W.A. (2002), The effect of the roll index(sky pointer) on roll reversal errors. *Journal of Human Factors and Aerospace*

FRANS GROTEPASS

SPECIAL FEATURES

HAIL ACCIDENT IN AIRCRAFT.

By Dave O'Neill

I was working for LET construction and we flew up to Komatipoort where we were building a railway line. My task was to do the measurement for the payment certificate.

This happened in 1984, we flew up with the company's aircraft that happened to be a twin engine Beechcraft baron 58 (a 6 seater) the registration was ZS-LET.

On board was the pilot Ken , Coen Bothma, Koos Rossouw, Phillip Cohen, his assistant (Jabulani) and me.

We flew from Rand Airport to Komatipoort via Nelspruit.`

I sat, as always, next to the pilot as I had a pilot's licence and it was thought that due to my interest in flying it was better that I sat there (in the interests of safety in case anything went wrong with the pilot who was nudging 60 plus years old) He had on the odd occasion been known to fall asleep while flying. I guess management preferred that I monitor things up front.

We flew up to Komatipoort on a beautiful day and went about our business on site after landing at Komatipoort airfield and dropping the pilot off at the hotel.

About mid-day I noticed that a bank of warm moist cloud was moving rapidly from the coast over Maputo towards Nelspruit, which would come over the Komatipoort area.

Knowing that the escarpment was between us and our route back to Rand airport in Germiston I was concerned.

This warm moist bank of rapidly moving cloud, moving towards the escarpment was a recipe for thunderstorm development.

I radioed Coen Bothma (the contracts manager) and said 'I think we should get to the airfield ASAP'.

His response was 'YOU PILOT TYPES ARE ALWAYS FULL OF STORIES'.

We got to the airfield some 2 hours later where we were met by the plant manager Hannes, who had picked up the pilot from the hotel and dropped him off at the aircraft. (No he was not drunk)

I remember saying to Hannes "I do not like the weather" as by now the whole area was overcast and the cloud was quite dark.

I expressed my concerns to the pilot about the possibility of thunderstorms over the escarpment on the way back to Rand airport. His comment was it was the beginning of the thunderstorm season so any thunderstorms will be small. WELL, read further.

We climbed out and were in solid cloud at 2000 feet.

Ken an accomplished and experienced pilot who was in the RAF after the war had flown spitfires and hurricanes in South Africa, as many RAF pilots were trained in South Africa.

Ken had many thousands of hours flying and was instrument rated, so the cloud was not a problem for him. In fact he let me fly on instruments as he continued keeping a watchful eye on the instruments which were mainly in front of him.

SPECIAL FEATURES

HAIL ACCIDENT IN AIRCRAFT. CTD.....

Approximately over Machadodorp things went bad, the cloud around us was dark ,I mean really dark. I was worried and asked Ken what happens if we fly into a thunderstorm (the aircraft was not equipped with weather avoidance radar) his response, being a seedy old pilot, was “well we hold on tight and hope we get out the other side”

All of a sudden these white specs flew past the aircraft at great speed some actually hitting the aircraft—hail the size of oranges.

One large piece hit the one piece windshield and it cracked, the next hailstone smashed my side of the windshield open.

A orange sized hailstone hit me straight in the face. If I had not been wearing glasses I may have lost an eye, even though the glasses were broken. I dropped my head below the console, another hailstone hit me on the top of my head, splitting the skin open about 100mm long.

All this time the aircraft was in severe turbulence, almost inverted at times.

Blood poured from my face and head spraying everyone in the aircraft. Between my legs on the seat was a pool of blood.

The one brave occupant behind me said, afterwards, “I came forward to help you. Ballocks he had his head between his legs. Everyone in the aircraft had welts and bruises from the hail to their faces that came through the window except Ken the pilot.

Now Jabulani right at the back was in any case scared of flying and had passed out after take-off. One large hailstone had whistled through between all the seats and hit him on the chest. I always think that things were bad when he passed out and a whole lot worse when the hailstone woke him up.

Ken the pilot skilfully flew the plane into a void between the thunderstorm cells, saw green below and came out under the cloud. He then set a course for Carolina airfield where we did an emergency landing.

Ken had radioed a mayday distress call to a military Dakota in the area who relayed a message to Jan Smuts airport (Oliver Tambo today) . The police were informed and an ambulance was waiting at the airfield (if I remember from what I was told) the ambulance was in fact the mortuary van as the ambulance was in for repairs.

I, at this point could not see as both my eyes were swollen shut. I was taken to the hospital and put in the emergency room on “the slab” awaiting the doctor who had to be called.

I did not know what my injuries were so I got off the table and went to the mirror, I must have done this 3 or 4 times .My clothes were soaked from the rain after getting out of the aircraft at the airfield and with the adrenalin I could not remember if I had looked at my face or not hence the many trips to the mirror.

When the doctor arrived the floor was covered in watery blood as I was soaked in blood, the wind had forced the blood down my sleeve when I tried to feel how bad the wound was on my head. I could in fact feel the bone of my skull.

I must say that in the aircraft no one screamed, everyone was scared. I at one point looked back at Coen Bothma, a huge ex rugby player, his face was the colour of a white wax candle, I will never forget that. Coen was somebody you could stand behind in a pub and give the finger to the roughest person in the pub and feel safe.

SPECIAL FEATURES

HAIL ACCIDENT IN AIRCRAFT. CTD.....

My thoughts were that my daughter would go through life without me as we were all convinced at a point we were going to land up in a smoking wreck in a wet field somewhere in Africa

In the hospital I received 15 stitches in my face and 24 on top of my head. The other occupants only had bruises to their faces.

Jabulani had a huge blue / black / red bruise on his chest. In the hospital I went to see him in the ward where he was relating his bravery to the nurses.

Something like "Lo Indisa (Airoplane) gena so (showing with hands), then mkulu hail chia (to hit) lo indisa mna jonga (see) yo mkulu (big) nyaga (trouble) namglange (today) yo yo yo (oh shit).

The last I heard of Jabulani, an alcoholic at the time of this incident, continued his drinking habit with renewed vigour after the incident.

When we got back to Johannesburg Coen took me home (about 3 in the morning) and had to lead me up to the front door, bandages all over my head. My wife opened the door and fainted. I remember him telling the story later "there I was holding Dawie in one arm and his wife in the other".

Anyway we were all alive. The hero of the day was the skilful flying of Ken. I sometimes wonder where he is today.

I have lost contact with all of the others and also wonder how they are. I wish them well as we had a moment together.

Dave O'Neill

SPECIAL FEATURES

WHAT A FAMILY WE HAVE.

By BRIAN APPLETON

This December I decided to do the pilots dream. I took my wife and mistress on holiday down the Transkei coast. As this is a family story, I must mention that the mistress has fabric wings and is called a Citabria.

Our first stop was Bethlehem, on boxing day for fuel. Phillip who works for Joggie Prinsloo was on standby and refuelled the aircraft. As it was boxing day, Phillip was on his way after refuelling us.

We were using a borrowed battery (another story) and the aircraft shot the Bendix and that was it. So unpacked the new tool kit and wife and I set about trying to look into what the problem could be.

So we took the cowling off, I probed around a little and then the wife said to me, are you sure it is not he battery? Of course not, I said…… wrong answer, it turns out, loaner battery for some reason at that point did not have the charge to fire up the Lycoming.

So a call back to Phillip, who was the hero of the day, he returned with jumpers and after a two hour extra on the ground we were on our way, heading for Himeville.

It just happened that our track put us on a 20mile extended centreline for the Himeville runway. What a beautiful part of the world to fly, gin clear day. However on short finals to this metropolus was Jason van Schalkwyk in his Maule ZS-LLV.

Now I know that Jason lives in Himeville but heard via Nico Brandt, the previous owner of this wonderful Maule that Jason was down the coast.

Well, what a wonderful surprize.

Warm greetings received on the ground, aircraft placed in a pre-arranged hangar and battery put on charge.

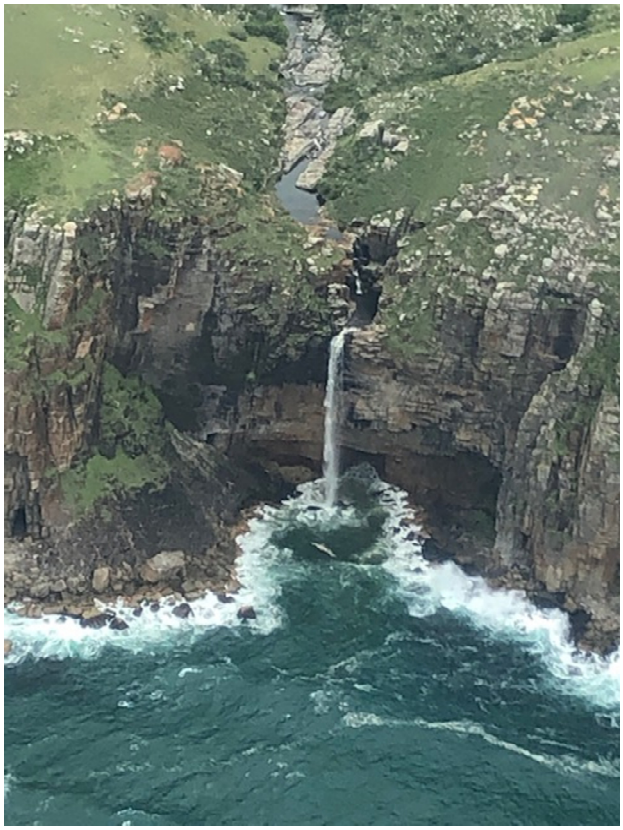
Shall we say that our accommodation (the Himeville arms) was not the quaint little country inn I remember, I had to remind my wife that a second rate bed is better than a first rate hangar floor.

The next day the clouds were waist high and I am no giant. So here the whole aviation community, lead by Jason, came to our rescue. New wife-pleasing accommodation was found (Karmichael farm, totally recommendable) and Jason was the consummate host. That night off to the golf club with the aviation community, fantastic evening.

SPECIAL FEATURES

WHAT A FAMILY WE HAVE CTD.....

Day three and the clouds started off at my shoulder height, again that is about five foot off the ground. Jason gave us again the grand tour of this beautiful area and yes about mid-day, there were signs that that clouds were lifting. Forever hopeful we packed up and made our way to the airfield.



With the aviation community standing by giving advice, we were told that one could see ***that*** peak and ***that*** valley was clearing so Jason gave us the final word that we could make it to Pietermaritzburg.

Aircraft packed, started with no battery problems, warmed up and off we go. Oops, I gave a little right brake and there was no brake.

Ok let's continue to PMB. We landed uneventfully at our destination and refuelled the aircraft.

Weather was improving all the time and after a discussion with my wife on the brake situation, we elected to continue our journey to Trennerys on the Transkei coast.

What a wonderful trip down this coast. I have done it many times and can only recommend it again and again. We did not go into Margate, as there was no fuel, but joined the coast around Port St Johns. Wonderful 15knot tail wind down the coast.

Now time to start thinking about the landing; we have a left brake, wind on the runway should be from the right so for those who fly taildraggers, will know this is a good start. The landing was uneventful on a runway that would be more suitable for a swarm of heli's.

SPECIAL FEATURES

WHAT A FAMILY WE HAVE CTD.....

Ok so now we need to get the brake fixed. We call Warren James (heli pilot) in East London, he calls the East London locals who have holiday houses in the area and arrangements are made for the next day.

So Leigh Pagel, Barry Galloway and the boys arrive to bleed the brake system. Between them we have the syringe, piping and all the necessary equipment to fix the problem. Within half an hour job done, the guys leave and I put the spat back on the aircraft.

One last test of the brake, disaster, same as before, it must be the master cylinder seals.

The whole braking system is under the foot board in this aircraft, to get to the master cylinder one has to take the seats out and dismantle a lot of the aircraft, not a job to do "on the beach" and parts this time of the year would be an issue.

Ok, so we have an aircraft with one brake and we need to do our fuel run to Wingspark. We wait for a few days and a gap in the weather appears. Off to Wingspark, a 20minute flight. We land safely but as the wind is quite breezy and now from the wrong side, we taxi doing a few Pirouettes on the runway. I send my wife out to push the upwind wing, while I taxi under power uphill towards the fuel bay. Certainly, I am sure you would agree, this is not chauvinistic as I have the licence to drive the craft. Patrick Hill comes out to meet us and once fuelled, he helps push the aircraft to the threshold of the runway, where the wind is from a suitable direction for our brake issue.

We land back at Trennerys. Over the next day I realise that I have been on the limit of my skill and that we have been very lucky up to now with our safe landings. I suggest to my long suffering wife/partner, that as the aircraft has only one brake and the uncooperative weather, I think we need to leave the aircraft in the capable hands of Dave Hart in East London and catch commercial back to Johannesburg. Plans were made and this was done.

But why did I want to write about these rather boring and unfortunate events. Very simple, what a community we have in aviation. Jason and the Himeville guys took such good care of us. Leigh, Barry and Patrick and the East London guys were right there to help us with our technical troubles. In every sense, we were really looked after every step of the way. What a wonderful community is our aviation family.

Brian Appleton

SPECIAL FEATURES

UNDERSTANDING TEMPORAL DISTORTION

By GEOFF FISH

I think most people are aware that temporal distortion exists, and even that it can adversely affect them whilst flying, but few people actually understand how it works.

The answer is incredibly simple but you will have to read the rest of this article to find it out

Most people have had an experience whilst under stress where their brains have raced and they seem to have experienced an incredible amount in a very short space of time.

I have had the experience in two car accidents I was involved in. One as the driver and one as a passenger. In the first instance, I lost control in the middle of a high speed bend on a narrow country road.

I came out of the bend going straight down the road but at a 45 degree angle, tried to tentatively correct but the car rotated in the opposite direction until I was going backwards at high speed between two high banks.

Inevitably the car started bouncing between the two banks, slowing as it went, then flicked around in the direction of travel, flipped up at about 45 degrees, tipped me out onto the road and then settled back on its wheels. [yes it was in the days before seat belts]

I was convinced that I had travelled about 800 metres during this experience. Later when I walked it, I found that whole accident was over in less than 100 metres.

This is a classic example of temporal distortion, where I was so intent on trying to recover that my brain appeared to be racing and the passage of time and distance seemed to expand.

I am sure that a lot of you will have had similar experiences.

Now, for the instance where I was a passenger: Although I had absolutely no control over the situation, exactly the same thing happened. The “time and distance warp” was considerable.

In both cases I was concentrating intently and in both cases I had severe temporal distortion.

Lastly, before getting to how you can be affected whilst flying, I want to point out the other extreme of temporal distortion: How often, when on your computer, have a couple of hours simply seemed to disappear in a flash? Once again, you would have been intent on the task in hand but this time under no stress. Neither was your brain “racing” as it would have been if you were under stress.

Let’s use the same example: This time you are at your computer but expecting your kid to return from school. The time comes and goes and they don’t arrive. You become more and more conscious of the time and, although you are tackling the task on your computer, you are acutely conscious of the time taken. Absolutely no temporal distortion takes place.

Now let’s take a look at the flying case. From the time I started to do my wings course we were made acutely aware of the fact the temporal distortion was dangerous and they gave us several examples, *but* they never explained *how* it actually worked.

Most of the examples involved abandoning the aircraft. They emphasised that you should not be so intent on an emergency situation, that you abandoned the aircraft too late.

SPECIAL FEATURES

UNDERSTANDING TEMPORAL DISTORTION CTD.....

If you were operating as a pair, and one pilot experienced an emergency situation, the other pilot had to carefully monitor his altitude and call for him to eject as he passed the minimum ejection altitude.

Later in my air force career, this exact situation happened to two of my squadron members. During a dog fight, one pilot inadvertently entered a spin. Sure enough, the spinning pilot passed the critical altitude without ejecting. The other pilot called urgently for him to "eject eject".

In the subsequent debrief this very experienced pilot was amazed that he was so cosy in his cockpit and working so very hard to recover from the spin, that he totally forgot about monitoring his altitude.

Another example that we were told about, sprang from the way the ejection seat worked:

We were not able to eject through the canopy so, when the ejection handle was pulled, the canopy was blown away by explosive bolts and after half a second, the pilot would follow.

In this situation, with the mind "racing" under the stress, this half second became an eternity. Some pilots injured themselves severely by wondering why they had not been ejected at what they felt was the half second point. They looked down to see what had gone wrong, only to be ejected with their necks in the bent position.

When my turn came, I was acutely aware of this problem and, after pulling the handle, had just managed to think the first word of "now keep your neck straight, this is the eternity" when I was blasted out.

Afterwards, I often wondered why I had experienced no temporal distortion. Unfortunately I never bothered to find out.

How I wish I had bothered. Throughout my flying career, I have been plagued by several experiences where I allowed for distortion unnecessarily, and in every case, this caused me embarrassment. I was always acutely aware of the problem but never understood how it worked.

You see, it is so very simple and I found out so very late. My eureka moment happened during my 40 year Matric reunion. One of the boys in my class had become a psychologist and I cannot remember how we got onto the topic of temporal distortion. He gave me the complete solution.

If, at any time you are experiencing temporal distortion, the millisecond you think about it, it will cease to exist! Any time you are totally absorbed in an activity, whether under stress or not, temporal distortion *will* take place. The moment you consider it, it will magically disappear.

So how does this knowledge help today's General Aviation pilot? The answer is: "I'm not sure"

With the advent of GPS and Standby GPS it probably isn't a factor in your "Lost Procedure". We pencil and stopwatch pilots had a very annoying "lost procedure".

If you were lost, you would take the time and direction from your last known point and construct a circle diameter 10% of your time from your last point. You would then check from Map to ground, searching for matching features.

The problem was that invariably you were lost *because* you had failed to start your stopwatch over the last point! The only way that knowledge of temporal distortion helped us in this situation, was that we knew our lost procedure wouldn't work and we would have to devise another plan.

SPECIAL FEATURES

UNDERSTANDING TEMPORAL DISTORTION CTD.....

English Electric Lightning as flown by the author

It remains the only UK-designed-and-built fighter capable of Mach 2.

The SAAF used a procedure call the “mini hack” where we used two stop watches. One in the normal way and the other, we started every time we crossed a line feature.

This procedure helped us to stay “found” where doubt reared its ugly head, by combating temporal distortion.

Dear reader, I had hoped to provide a definition of temporal distortion at the beginning of this article. I gave up after googling it. Hopefully the description I gave is enough of a definition and you will probably have a good idea of how it works.

The google definition reads: A temporal distortion is a warp or fracture in the spacetime continuum which can oft times be associated with the phenomenon of time travel, but also capable of destroying a starship if they were too strong.

This is not what I am going on about.

TECH TALK

By NEIL BOWDEN

EAA USA offer regular informative webinars to their members. These cover a wide variety of subjects from aircraft maintenance tips, piloting and proficiency, aircraft building just to name a few. It's a good investment to become an EAA USA member, just to get access to these webinars. $40 will buy you a yearly membership and it can be taken out easily on-line www.eaa.org

This month we have done a short summary of one of these webinar Van's RV Maintenance Common Questions.

This webinar by Vic Syracuse covers common maintenance / airworthy items picked up in his work shop during RV inspections and is applicable to other homebuilt aircraft. Vic has a long list of credentials which include;

11 Time aircraft builder
EAA Tech Counsellor & Flight Advisor
Chair EAA Homebuilt Aircraft Council
Commercial Pilot 9 500 Hours
Author "Checkpoints" column *Kitplanes* and *Sport Aviation*
Owner / Operator Base Leg Aviation KFFC

Most Common Maintenance / Airworthy Items

Jamnuts & Loctite

Still finding loose jamnuts! These 3 photos were found in January alone during annual inspections at Vic's shop – the photo above shows aileron control linkages and elevator spar! This problem comes up repeatedly.
Why don't we just use Loctite on jam nuts and what type Loctite should we use?
Vic's opinion is that we don't have to use Loctite on jamnuts. If they are made properly tight the first time they are not going to come loose.
50 and 60 year old aircraft have repeatedly passed through Vic's shop and jamnuts are still tight!

"*Please. Please. Please – help eradicate loose jamnuts*" Vic appeals!
3 types of Loctite you will want to have in your shop;
Blue one (242), in big bottle, is one you may have to use all the time, for a nut you may have to move in the future.
Red Loctite is "forever" applications. If you do need to loosen it you will have to use some heat, use this one very sparingly.
Green one is primarily for sleeved bearings and can be used on nuts in the airplane that sometimes do come loose.

TECH TALK

Air Filters!!! – Clean or Replace
Shrinking Air Filters - filters shrink in both length and height. Check yours to see if the fit is still good. Filters also become hard and brittle with age.
Clean your filter at least every 100 hours.

Square filters do not shrink but can be damaged by backfires – see photo. This can adversely affect the structural integrity of your filter and could cause the filter to collapse and block your air intake!

Intake Hoses and Gaskets
These become hard and brittle and should be replaced at around 400 hours. Remember to replace lock washers at the same time, lock washers should only be used once!

Check Control Travel on carburettor
Make sure you are getting full rich and full throttle. If you are not getting full rich on a new engine, you could be damaging your engine.

Magnetos, plugs and wires
Clean your plugs once in a while and check gaps (16/1000th to 19/1000th thousands max gap on aviation plugs powered by a magneto) and check resistance with a ohm meter - 5 000 ohms or less but according to Vic, 2 500 ohms or less is better, otherwise you may have some hot starting problems
500 Hour Slick Service Bulletin – replace contact points and carbon brush.

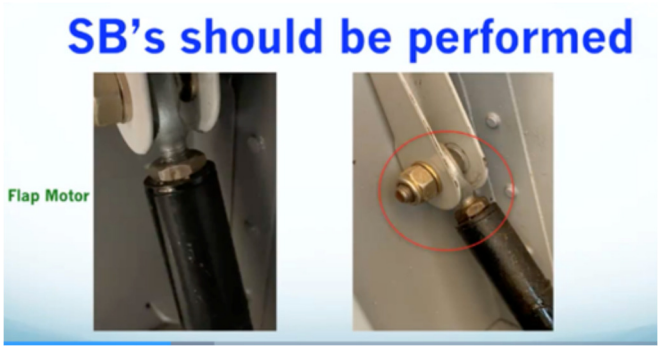
Slick 1-15A Service Bulletin
One bulletin everyone is missing is 1-15A and this one is critical! Affects Serial No's in years 2008 up through year 2016. During this period Slick switched to a copper wiper arm which is prone to breaking loose. This can cause the magneto to fire anywhere or fail.

TECH TALK

Safety Wire or Nord Lock Washers

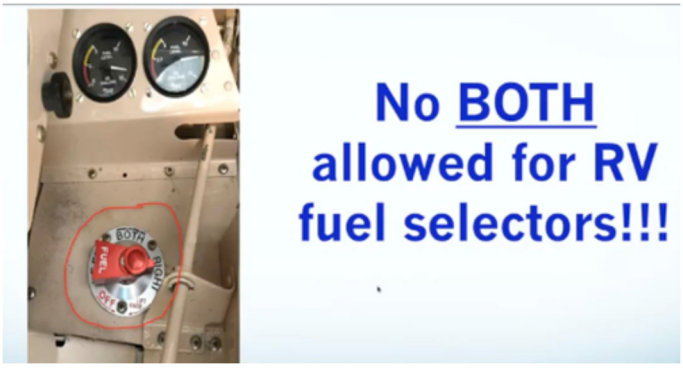
No. 1 offender – brake callipers are supposed to be safety wired or use Nordlock washers. Blue Loctite can be considered as well but can cause problems later.

No 2 offender that keeps coming up is wheel pants bracket. This should be a drilled head bolt and safety wired. This bolt will come loose!



No.3 offender – Flap Motor service bulletin – safety wire required on linkage in case jamnut comes loose. This will cause flaps to float!

Oil Cooler Supports
These tend to crack and need to be beefed up.



Tail Wheels and Nose Wheels
Check springs, replace rusty parts. Grease fittings – make sure bearings are properly greased. Nosewheel also has grease fitting! And check bearings are not shot.

Fuel Selectors
No "Both" allowed on RV's. Works when tanks are full, but can suck air when tank levels drop. A recent fatal accident occurred in Alabama because of this

Fuel Flow Sensors
If yours are located in the engine compartment, they will last longer if heat wrapped

Trim Tab Hinge Pin
Should be secured with cotter pin or safety wired. Could move out and start to hit your

These are just some of the common items that crop up – the full webinar is 1 hour 30 minutes and includes an question and answer session. Hope these can be reminders not only for your next inspection, but items to keep an eye on regularly!

PROJECTS

JOHN ILSLEY'S REPLICA COMPER SWIFT PROJECT

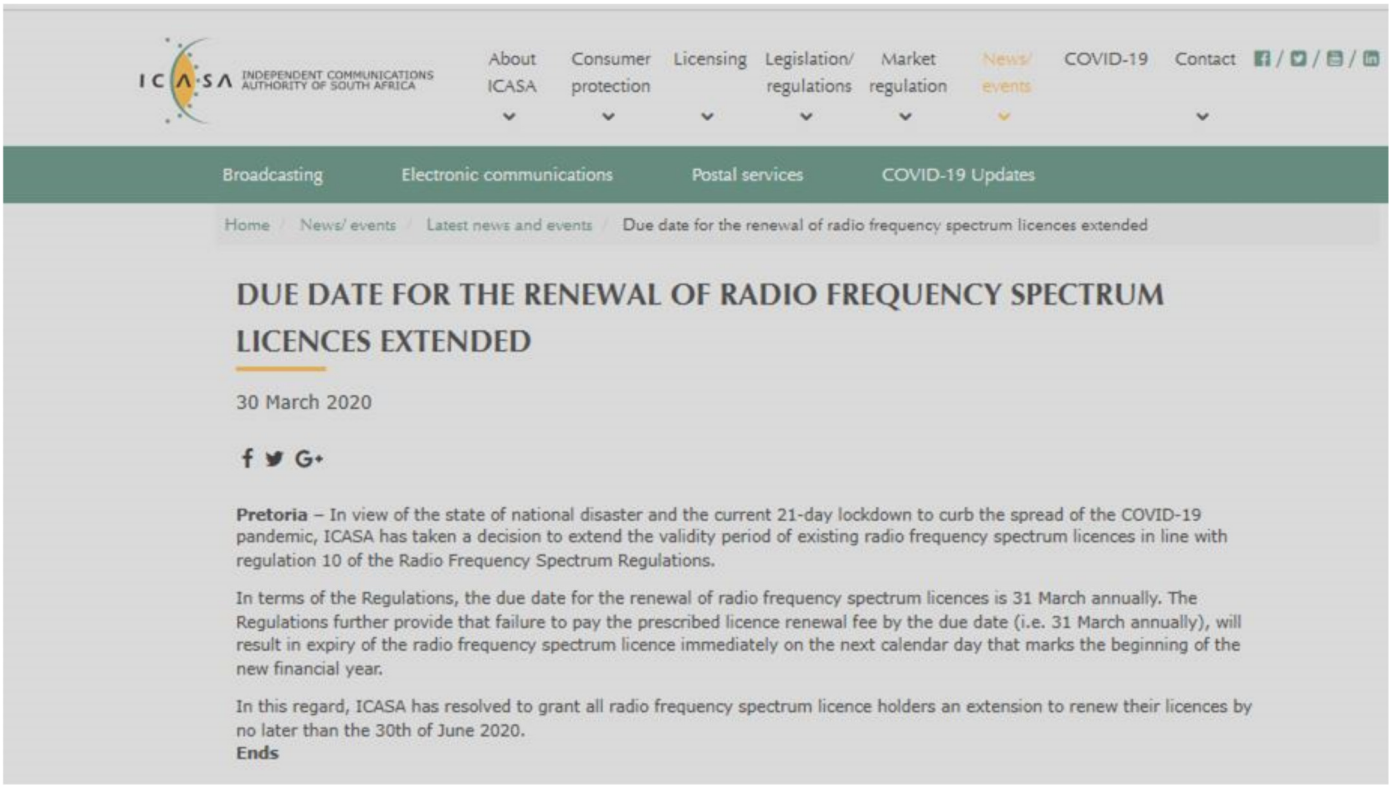
Unfortunately several metal fittings made in different parts of the country cannot be transported, so that is causing delays on aspects such as the undercarriage.

PROJECTS

RICHARD NICHOLSON'S PIPER TRIPACER PROJECT

The rebuild project of ZS WBU, a 1957 Piper Tripacer nearing completion. New covering after complete strip down. Engine overhaul by AEP at Wonderboom. Complete re-arranged panel with slight upgrade but authenticity was required as far as possible. Wiring was started by someone else and I am now in process of completing it. This is my 21day shutdown task.

ICASA COVID-19 update



ICASA INDEPENDENT COMMUNICATIONS AUTHORITY OF SOUTH AFRICA

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Broadcasting | Electronic communications | Postal services | COVID-19 Updates

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DUE DATE FOR THE RENEWAL OF RADIO FREQUENCY SPECTRUM LICENCES EXTENDED

30 March 2020

Pretoria – In view of the state of national disaster and the current 21-day lockdown to curb the spread of the COVID-19 pandemic, ICASA has taken a decision to extend the validity period of existing radio frequency spectrum licences in line with regulation 10 of the Radio Frequency Spectrum Regulations.

In terms of the Regulations, the due date for the renewal of radio frequency spectrum licences is 31 March annually. The Regulations further provide that failure to pay the prescribed licence renewal fee by the due date (i.e. 31 March annually), will result in expiry of the radio frequency spectrum licence immediately on the next calendar day that marks the beginning of the new financial year.

In this regard, ICASA has resolved to grant all radio frequency spectrum licence holders an extension to renew their licences by no later than the 30th of June 2020.

Ends

Covid-19 updated information is available on www.eaa.org.za including all aviation related articles. Please feel free to update us, should you have further relevant information. Email rsvp@eaa.org.za

eaa.org.za/covid-19-update-and-related-aviation-topics/

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Covid-19

http://eaa.org.za/covid-19-update-and-related-aviation-topics/

With the onset of this devestating virus, all gatherings have been cancelled until further notice. South Africa entered a lock down from 23:59 on 26 March 2020. At this stage, we are advised that this is for the period ending 23:50 on 16 April 2020.

We will endevour to keep aviators updated on all matters that may affect us and are relevant. These are published as below :

EAA INITIATIVE

All events and gatherings have been postponed, with the exception of the EAA AGM, due to take placeon 23 May. This will take place virtually should we not be able to meet in person.
Special EAA Initiative Appeal : Letter by Karl Jensen of EAA of SA
Member and Aviation Communications to update all as at 25 March 2020 : Email can be viewed HERE

SACAA

EXCEPTION FOR EXTENSIONS : SA CAA Communique as at 26 March 2020 : Granting of Exemptions (extensions)
FLIGHT RESTRICTIONS : Lockdown NOTAM : A1364/20 NOTAMN below can be viewed on SA CAA website HERE
A1364/20 NOTAMN Q) FAXX/QXXXX/IV/NBO/E/000/999/5152S01651E999 A) FAJA FACA FAJO B) 2003271931 C)

COVID-19 CAA update

SOUTH AFRICAN
CIVIL AVIATION AUTHORITY

SA Civil Aviation Authority
Private Bag X73
Halfway House
1685
Tel: (011) 545 1000
Fax: (011) 545 1201
Website: www.caa.co.za

INDUSTRY COMMUNIQUE FROM THE SACAA

On 23 March 2020, President Cyril Ramaphosa, announced a country-wide lockdown from midnight 26 March 2020 until midnight 16 April 2020.

The Regulator wishes to share some of the key business decisions taken in order to optimally service the civil aviation industry during the lockdown period.

The President announced some measures related to aviation travel as follows:

(a) South African citizens and residents arriving from high-risk countries will automatically be placed under quarantine for 14 days.
(b) Non-South Africans arriving on flights from high-risk countries are prohibited from disembarking from aircraft and will be turned back.
(c) International flights to Lanseria Airport will be temporarily suspended.

Revision of Regulations promulgated on 18 March 2020 by the Minister of Transport:

The SACAA is tasked with the responsibility to conduct oversight, monitor and enforce the Regulations that were issued by the Minister of Transport on 18 March 2020, as well as associated guidelines that were issued by the Director of Civil Aviation.

Following the President's announcement, the Minister of transport has issued directives as follows:

(1) All international and domestic flights are prohibited, irrespective of the risk category of their country of origin.
(2) Only essential air cargo will be allowed, however, cargo from high risk countries must be sanitized.

COVID-19 CAA update

SACAA Specific Industry Response Plan during the Lock-down:

1. **Validity of Personnel licences**

- No new aviation personnel licences will be issued during the lock down period.
- The SACAA will issue an extension enabling licensed personnel whose licences expire between 26 March 2020 and 30 April 2020 to exercise the privileges of their licenses for an extended period of up to 26 June 2020. This applies to the following licence categories:
    - Pilot
    - Air Traffic Controller
    - Cabin Safety/Cabin Crew
    - Aircraft Maintenance Engineer
    - Aviation Security Screeners
    - Aviation Security Instructors
    - Flight Engineers
    - Designated Examiners
- Class I, II, III and IV medical certificates will be extended for a period of up to 26 June 2020 subject to the conditions attached to each certificate.
- Dangerous goods and aviation security training certificates will be extended for up to 26 June 2020.
- If your current flight review or proficiency check expires after 01 March 2020, you will be able to continue to use all the privileges of your licence for up to 26 June 2020.
- Air Operator Certificate holders will have relief from Part 121 and Part 135 pilot proficiency checking, dangerous goods training and checking requirements for up to 26 June 2020.

Each set of these exemptions listed above will have its limitations and conditions to ensure safe operations of an aircraft. The limitations will amongst others include the pilot recency, no known medical conditions and individual operator mitigation plans.

COVID—19 CAA update

2. Writing of Civil Aviation Personnel Licence Examinations

- From 27 March 2020, examinations will be suspended at all SACAA venues.
- The Manager: Examinations will communicate the new schedule in due course, depending on the prevailing circumstances within the country.
- Clients will not be required to pay any additional examination fee for rescheduled examination sessions as a result of this arrangement.
- Theoretical examinations expiring within the lock down period shall be extended for a period commensurate with the lockdown period.

3. Inspections

Inspections and audits paid for by clients are suspended until further notice.

All inspections which fall within the scope of the Minister's regulations dated 18 March 2020 will continue.

- No new applications shall be processed during the lock down period, e.g. Air Operator Certificates, approvals for Aviation Maintenance Organisations, Airports, Design Organisation Approvals, Aviation Training Organisations, Regulated Agents, Known Consignors, Security Training Organisations, Screening Organisations, Type Certificate, Type Acceptance, Aircraft Registration etc.
- All existing operators/owners intending to renew their approval certificates and certificate of airworthiness during this period must submit applications and proof of payment electronically to the relevant officials.
- The SACAA will conduct desktop inspections and may request additional evidence where necessary.
- As usual, approvals will only be granted when payments are cleared.

4. Airport and Air Traffic Services operations

- All approvals expiring between 27 March and 30 April 2020 are granted extension up to 26 June 2020.

- For upgrade or downgrade of aerodromes or firefighting service category, etc., a risk assessment should be conducted with an application for exemption, by email to one of the Senior Management listed below for further processing:

COVID—19 CAA update

- Nelson Nkabiti, Senior Manager: Aerodrome Safety. Cell:0834616175, email: nkabitin@caa.co.za
- Sandile Maphanga, Senior Manager: Air Navigation Services Cell:0834512603, email: maphangas@caa.co.za

These measures will be reviewed from time to time and as circumstances dictate. All communication during this period will be uploaded on the SACAA website.

Conclusion

The SACAA is committed to heed the call by the President by adhering to the 21-day lock down period. In addition, the SACAA will implement the above measures to provide services to the industry.

The SACAA offices will remain closed albeit with Staff on standby for critical services however this will be assessed and shall be at the discretion of the Executive responsible. The standby list shall be available on the website of the SACAA.

The industry is required to check the SACAA website on www.caa.co.za and social media platforms for future updates. Please also note these important telephone numbers:

- SACAA employees with company cell phones will be contactable via their cell phones which will be loaded on the website at www.caa.co.za/contactus.
- NICD hotline **0800 029 999**.
- WhatsApp service for queries related to COVID-19. Simply add **060 012 3456** as a WhatsApp contact and type 'Hi' in the message block for access to relevant information.

END

SAFETY MATTERS

EXTRACT FROM ASN SAFETY DATABASE

AviationSafetyNetwork
an exclusive service of Flight Safety Foundation

FLIGHT SAFETY FOUNDATION
www.flightsafety.org

ASN Aviation Safety Database results
Last updated: 29 March 2020
WikiBase - Add and edit accidents yourself
Yes, you can add accidents and incidents to the ASN WikiBase yourself! Or you can correct or update existing accidents. You can add any aviation accident or incident you like: general aviation, military, helicopters etc. As long as they are not covered in the main ASN Safety Database.

>>Add an accident.

This information is added by users of ASN. Neither ASN nor the Flight Safety Foundation are responsible for the completeness or correctness of this information.

1167 occurrences in the ASN safety database
showing occurrence 1 - 100

* = This is an accident from the main ASN Accident Database and cannot be edited.

acc. date	type	reg.	operator	fat.	location	dmg
24-MAR-2020	Bell 505 JetRanger X	ZT-RJC	Private	1	Christiana, North West	sub
19-MAR-2020	Bell 206B JetRanger III	ZS-HCZ	Private	0	near Vischgat, near Vereeniging	sub
15-MAR-2020	The Airplane Factory Sling 4 TSi	ZU-IPS	Private	1	Umkomazi River Valley, Kwazulu-Natal	w/o
08-MAR-2020	Piper PA-28-180	ZS-FHC	FlyFofa	0	within Pretoria, South Africa	sub
04-FEB-2020	Robinson R22 Beta II	ZS-RIS		0	Worcester	sub
* 23-JAN-2020	Cessna S550 Citation S/II	ZS-CAR	S.A. CAA	3	5 km NW of Friemersheim	dst
20-JAN-2020	Grumman G-164A Ag Cat	ZS-IRW	Platorand Lugbespuiting	0	Doornkop Township, Middelburg, Mpumalanga	sub
12-JAN-2020	B&F Technik FK14 Polaris	ZU-EWD	Private	2	Springs	w/o
12-JAN-2020	Solo Wings Windlass	ZS-WRG	Private	0	between Brandfort and Tehunissen	w/o
02-JAN-2020	Airbus A340-343	TC-JNI	THY Turkish Airlines	0	Cape Town International (FACT)	min
28-DEC-2019	Bell 407	ZS-RBL		0	Sunninghill Hospital, Johannesburg	min
10-DEC-2019	Boeing 737-4S3	ZS-DMI	FlySafair	0	near Johannesburg	non
05-DEC-2019	Robinson R44 Raven	ZS-RRS	Private	1	Eshowe, uMlalazi, KwaZulu-Natal	w/o
02-DEC-2019	Scheibe SF 25D	ZS-UUA	Private	2	near Plettenberg Airport (PBZ/FAPG), Western Cape	sub
28-NOV-2019	Bell 505 JetRanger X	ZT-RDR	Kimfly Charters	0	Near 3 South African Infantry Battalion Grounds, Kimberley, Northern C	sub

IN MEMORIAM

LETTER FROM KIM PRATLEY TO KRUGERSDORP FLYING CLUB

JOHN ADDIS

Dear Members, Wednesday April 1 2020

It is with a very heavy heart that I have to advise you of the passing away (at 10 am today, Wednesday 1 April) of our esteemed colleague, close friend and trusted Chairman of the club, John Addis.

Some years ago John had a melanoma removed from his eye. Sadly this put an end to his flying and ultimately led to him suffering the devastation of Liver cancer.

Despite no longer flying and not owning a hangar he unselfishly continued to devote countless hours of passionate dedication to the KFC for which we will be eternally grateful.

John was an outstanding Chairman and always had the very best interests of the Krugersdorp Flying Club and its Members at heart.

In addition to being the Chairman, John also managed the fuel portfolio with exceptional competence.

The passing of John is a great blow to the KFC and he is going to be sadly missed.

Our thoughts and prayers are with Larissa and his family in this very difficult time

Details regarding a Memorial Service will be communicated to Members once available after the lock-down period.

Sadly, due to the lockdown we are not even able to send flowers to Larissa.

Temporarily, I will stand in as Acting Chairman of the club until the committee is able to elect a new Chairman.

I will also in the coming days communicate with committee members regarding the allocation of specific portfolios.

Please keep safe

Kind Regards

Kim Pratley

Vice Chairman (Acting Chairman)

LAST WORD

This is hopefully the first and only edition of CONTACT! to appear during our Country's emergency Lockdown.

We have been forced indoors, away from the freedom of our chosen passion and keeping the figurative "blue side on top" will be a challenge of huge proportions.

At the time of going to print, we are 13 days into National Lockdown and in my isolated world, the cracks of insanity are already appearing.

I am feeling depressed and miserable and keeping motivated and positive is going to take all my energy.

And yet, I am in an extremely fortunate position, where I have friends and family in the same position as I, who can cheer me up and encourage me to keep going.

The Corona debacle has given me time to reflect on my good fortune and the ill-fortune of millions of our countrymen and women for whom the prospect of 21 days in isolation will be fraught with high stress and hardship.

We have yet to see the predicted escalation of COVID 19 infection which will be accompanied by a horrifying death toll, as we are seeing in Europe, before the spread of the disease comes under control.

From the comfort of your home, with running water and flush toilets, spare a thought for those people who are confined to a single room, sometimes shared with numerous others, who are forced to live in conditions which make it impossible to maintain the most rudimentary hygiene practices and where the spread of the Corona Virus is almost guaranteed.

For too many of these people, proper medical care is not a possibility and a protracted, suffering death is a high probability.

Rather than complaining about not being able to fly, give thanks for the food on your table and the comfort you experience in believing that you are safe, or at worst, in the expectation that you will have access to adequate medical care should you contract the virus.

Keep safe and encourage those around you to treat with seriousness, the measures in place to slow down the spread of the disease.

Eugene Couzyn

EAA
THE SPIRIT OF AVIATION